CLAIMS

1. A method for detecting a de-myelinating disease or spongiform encephalopathy in mammals which comprises testing a biological sample obtained from the mammal for IgA antibodies which bind to an *Acinetobacter* antigen.

2. A method according to claim 1, in which the *Acinetobacter* is one which presents to the mammal an antigen which exhibits molecular mimicry with the myelin of the mammal.

3. A method according to claim ~~1 or 2~~ 1, in which the antibodies are indicative of prior infection by *Acinetobacter calcoaceticus*.

4. A method according to claim ~~1, 2, or 3~~ 1, in which the antibodies tested for are antibodies which bind to an epitope present in or derived from the *Acinetobacter* species or to a prepared peptide sequence corresponding thereto.

5. A method according to ~~any of claims 1 to 4~~ claim 1, in which the disease tested for is bovine spongiform encephalopathy.

6. A method according to ~~any of claims 1 to 4~~ claim 1, in which the disease tested for is multiple sclerosis in humans.

7. A method according to ~~any of claims 1 to 4~~ claim 1, in which the disease tested for is Creutzfeldt-Jacob disease in humans.

8. A method according to ~~any of the preceding claims~~ Claim 1 in which antibodies are assayed and a positive result is indicated by levels of antibodies at least about two standard deviations above that of control samples.

9. A test kit for use with a method according to ~~any of claims 1 to 8~~ Claim 1, in which the test antigen is the whole *Acinetobacter* organism or at least one prepared peptide sequence corresponding to an *Acinetobacter* epitope, said test kit including a secondary antibody against the human, bovine, or other mammalian IgA.

10. A method according to claim ~~1, 2, or 3~~ 1, in which the antibodies tested for are antibodies which bind to a peptide sequence conformationally similar to an *Acinetobacter* epitope.

11. A method according to claim 10, in which the epitope is the peptide sequence ISRFAWGEV.

12. A method according to claim 10, in which the epitope contains the peptide sequence RFSAWGAE.

13. A test kit for use with a method according to claim ~~10, 11, or 12~~ 10, in which the test antigen is a peptide sequence which is conformationally sufficiently similar to an *Acinetobacter* epitope to bind to the relevant antibodies, said test kit including a secondary antibody against the human, bovine, or other mammalian IgA.

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14. A test kit according to claim 13, comprising a peptide having the sequence RFSAWGAE or ISRFAWGEV.

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15. A test kit according to claim 9, ~~or according to claim 13 or 14~~, in which the secondary antibody is a rabbit anti-human IgA or rabbit anti-bovine IgA.

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